

### **REMARKS**

This is in full and timely response to the non-final Office Action dated March 23, 2006. September 23, 2006 fell on a Saturday; therefore, submission of this Amendment as filed on Monday September 25, 2006, which is the "next succeeding day which is not a Saturday, Sunday, or a Federal holiday," is deemed timely in accordance with MPEP § 710.05.

The present Amendment amends claims 4, 6, and 11 in order to further clarify a portion of the scope sought to be patented, and otherwise disputes certain findings of fact made in connection with the rejection of the claims. New claims 12 – 14 have also been added to depend from independent claim 1. Support for these amendments can be found variously throughout the specification, including, for example, original claims 4, 6, and 11, and in the Specification on page 12, line 21 to page 14, line 9 and in Tables 1 and 2. No new matter has been added. Accordingly, claims 1 to 14 are presently pending in the application, each of which is believed to be in condition for allowance. Reexamination and reconsideration in light of the present Amendment and the following remarks are respectfully requested.

#### **Claim to Priority**

Acknowledgement of the proper receipt of the certified formal papers filed in connection with Applicant's claim to priority under 35 U.S.C. § 119(a)-(d) is noted with appreciation.

#### **Information Disclosure Statement**

It is also noted with appreciation that the Information Disclosure Statements filed on March 13, 2004 and September 15, 2004 have been considered by the Examiner.

#### **Claim Rejections- 35 U.S.C. § 112**

In the Action, claims 4, 6, and 11 were rejected under 35 U.S.C. § 112, second paragraph, for alleged indefiniteness. Applicant respectfully traverses this rejection. However, in order to expedite prosecution, claims 4, 6, and 11 have been amended in accordance with the examiner's suggested amendments and comments. Withdrawal of this rejection is therefore courteously solicited.

### **New Claims**

Support for new claims 12 – 14 can be found variously throughout the specification, including, for example, on page 12, line 21 to page 14, line 9 and in Tables 1 and 2. Accordingly, since each of these new claims is clearly distinguishable from the applied art of record, allowance of the same is courteously solicited.

### **Claim Rejections- 35 U.S.C. § 102**

Claims 1 – 3 and 5 were rejected under 35 U.S.C. §102(b) as being anticipated by Allison et al. (U.S. Patent No. 6,160,034) (“Allison”) taken in view of the evidence given in Hattori et al. (US Patent No. 2005/0096410) (“Hattori”). Claims 1 – 6 were rejected under 35 U.S.C. §102(e) as being anticipated by Ota et al (U.S. Patent No. 6,916,862) (“Ota”) taken in view of the evidence given in Hattori. Claims 1 – 3, 6 – 7, and 9 were rejected under 35 U.S.C. §102(b) as being anticipated by Wang et al. (U.S. Patent No. 5,769,931) (“Wang”) taken in view of the evidence given in Hattori. Claims 1 – 3, 5 – 7, and 9 – 10 were rejected under 35 U.S.C. §102(b) as being anticipated by EP 964036 taken in view of the evidence given in Hattori.

To properly anticipate a claim, the document must disclose, explicitly or implicitly, each and every feature recited in the claim. *See, e.g., Verdegall Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claim 1 as amended recites, *inter alia*, a *water based ink for ball-point pen comprising a solvent formed by a water and an alcoholic solvent having a vapor pressure at 20 °C of 0.5 kPa or higher, a pigment constituting a coloring material, a wetting regulating agent, an antirusting lubricant, and a water-soluble resin constituting a writing fixing agent, wherein an ink viscosity at 20 °C is within a range of 5 to 30 mPa·s.*

In contrast, while Allison arguably discloses a low-viscosity ink composition, Allison fails to disclose, teach, or even suggest an ink composition containing either a wetting regulating agent or an antirusting lubricant as disclosed in claim 1.

Ota arguably discloses a low viscosity inkjet recording ink which includes a “wetting agent” which is used for dispersing a pigment in an aqueous solution to raise the dispersion efficiency of the pigment in the dispersing medium (*see column 6, line 60 through column 7, line 2 of Ota*). Therefore, it is clear from the disclosure of Ota that the term “wetting agent” as used in Ota refers to an agent which increases the affinity of the particulate pigment to the aqueous medium into which it is to be dispersed (*see column 6, lines 65 – 67 of Ota*). However, Ota fails to disclose, teach, or even suggest an ink composition containing a “wetting regulating agent,” as disclosed in claim 1. The disclosure of the present Application makes clear that the term “wetting regulating agent” refers to an agent which is used to realize a stable ink wetting on a non-permeable surface (*see page 13, lines 3 – 4 of the present Application*), and therefore, the use of a “wetting regulating agent,” as recited in claim 1, is not anticipated by the “wetting agent” disclosed by Ota.

Additionally, Ota fails to disclose, teach, or even suggest an antirusting lubricant, as recited in claim 1.

Wang arguably discloses a non-Newtonian ink composition which includes a “wetting agent” or lubricant to ensure that the ink is capable of wetting the metal used in the tip of the pen in order to provide an acceptable rate of delivery of the ink to a writing surface (*see line column 4, lines 18 – 22 of Wang*). However, Wang fails to disclose, teach, or even suggest an ink composition containing a “wetting regulating agent,” which is used to obtain a stable ink wetting on a non-permeable writing surface.

Additionally, Wang fails to disclose, teach or even suggest an ink composition having *an ink viscosity at 20°C within a range of 5 to 30 mPa·s*, as recited in claim 1. Rather, Wang teaches a non-Newtonian ink composition which has a very wide range of viscosities at any given temperature, with the viscosity changing in relation to the amount of shear force which it is

subjected to. A desired viscosity profile for the ink composition of Wang, for example, ranges from less than about 50 to less than about 10,000 mPa·s (*see column 2, lines 15 – 22 of Wang*). The presently claimed composition, on the other hand, includes only compositions with a viscosity in the range of 5 to 30 mPa·s, regardless of the shear force applied.

Further, Wang fails to disclose, teach, or even suggest an antirusting lubricant, as recited in claim 1.

EP 964036 also arguably discloses a non-Newtonian ink composition which may optionally include a “wetting agent,” but the specific function of the “wetting agent” is unclear from the disclosure (*see page 6, lines 13 – 15 of EP 964036*). Additionally, EP 964036 does not show any examples which include any of the listed “wetting agents.” Therefore, EP 964036 fails to disclose an ink composition containing a “wetting regulating agent,” which is used to obtain a stable ink wetting on a non-permeable writing surface.

Additionally, EP 964036 fails to disclose, teach or even suggest an ink composition having *an ink viscosity at 20°C within a range of 5 to 30 mPa·s*, as recited in claim 1. Rather, as in Wang, EP 964036 teaches a non-Newtonian ink composition has a very wide range of viscosities at any given temperature, with the viscosity changing in relation to the amount of shear force which it is subjected to (*see Table 1 of EP 964036*). In fact, none of the Examples disclosed in EP 964036 has a viscosity in the range of 5 to 30 mPa·s, even at the higher shear rates (*see Table 1 of EP 964036*).

EP 964036 also fails to disclose, teach, or even suggest an antirusting lubricant, as recited in claim 1.

Accordingly, because each of Allison, Ota, Wang, and EP 964036 fails to disclose, teach or suggest each and every limitation of claim 1, a *prima facie* anticipation rejection has not been established, and withdrawal of these rejections is respectfully requested. *See, e.g., Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”). *See also Richardson v. Suzuki*

*Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1566 (Fed. Cir. 1989). (“The identical invention must be shown in as complete detail as is contained in the ... claim.”).

Moreover, aside from the novel limitations recited therein, claims 2 – 7 and 9 – 10, being dependent either directly or indirectly upon allowable base claim 1, are also allowable for at least the reasons set forth above. Withdrawal of the rejection of these claims is therefore courteously solicited.

### **Claim Rejections- 35 U.S.C. § 103**

Claim 4 was rejected under 35 U.S.C. §103(a) as allegedly being obvious over Wang or EP 964036, in view of Ota. Claims 7 – 11 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Ota in view of U.S. Patent No. 5,678,942 to Kobayashi et al. (“Kobayashi”). Claims 8 and 10 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Wang in view of Kobayashi. Claim 8 was rejected under 35 U.S.C. §103(a) as allegedly being obvious over EP 964036 in view of Kobayashi.

According to Federal Circuit precedent, the burden of establishing a *prima facie* case of obviousness under 35 U.S.C. § 103 rests squarely on the shoulders of the Examiner. *In re Rinehart*, 531 F.2d 1048, 1052 (C.C.P.A. 1976); *accord*. MPEP 2142. To establish a *prima facie* case of obviousness, certain essential criteria must be met.

An essential element in showing a *prima facie* case of obviousness requires that the prior art reference (or references when combined) must teach or suggest each and every claim limitation. *See, e.g., In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *accord*. MPEP 2143.03.

As shown above, *supra*, none of the references cited discloses, teaches, or even suggests a wetting regulating agent, as claimed in claim 1 of the present Application. The reference not previously cited in the above rejections under 35 U.S.C. § 102, Kobayashi, is drawn to a mechanical ball point pen, and likewise does not disclose, teach, or even suggest an ink composition containing a wetting regulating agent.

Accordingly, because Wang, EP 964036, Ota, Wang, and Kobayashi, either alone or in combination, fail to disclose, teach or suggest each and every limitation of claim 1 and any claim

depending on claim 1, a *prima facie* case of obviousness has not been established, and withdrawal of this rejection is respectfully requested. *See, e.g., In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *accord.* MPEP 2143.03.

Another essential element in establishing a *prima facie* case of obviousness requires that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *See, e.g., Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985) (“To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references”); *In re Geiger*, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987) (“When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references”; *ACS Hosp. Sys. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984) (“Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination”); *accord.* MPEP 2143.

The claimed ink composition and the claimed ballpoint pen utilizing the ink composition, as claimed in the present Application, **enable writing on non-permeable surfaces with a ballpoint pen**. Since none of the references cited in the Office Action even suggests that the compositions and/or the ballpoint pens disclosed by them are capable of writing on a non-permeable surface, one of ordinary skill in the art would not be motivated by the disclosures to modify the references or to combine the reference teachings to achieve such a result.

For instance, in EP 964036, the Example compositions were all tested by writing on paper (*see page 9, paragraph 54 of EP 964036*). All the Examples described in Ota show inks ejected from ink jet printers, and therefore Ota would not motivate anyone to use the ink compositions disclosed to produce a ballpoint pen ink or pen capable of writing on a non-permeable surface. Wang and Kobayashi are both silent as to the intended writing surfaces for the disclosed

compositions and ballpoint pens; but, as indicated in the disclosure of the present Specification, “the [invention] provides an ink for a ball-point pen ... [that] enables the writing on the non-permeable surface not achievable with a ball-point pen, thereby greatly expanding the application of the ordinary ball-point pen, and a ball-point pen utilizing such ink” (*see page 4, line 24 through page 5, line 4 of the present Specification*).

Accordingly, because Wang, EP 964036, Ota, and Kobayashi, fail to provide some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings to arrive at the invention of the present Application of claim 1 and any claim depending on claim 1, a *prima facie* case of obviousness has not been established, and withdrawal of this rejection is respectfully requested. *See, e.g., In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *accord.* MPEP 2143.03.

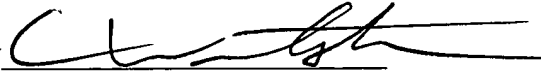
**CONCLUSION**

For at least the foregoing reasons, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the examiner is respectfully requested to pass this application to issue. If the examiner has any comments or suggestions that could place this application in even better form, the examiner is invited to telephone the undersigned attorney at the below-listed number.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. KKP-0276 from which the undersigned is authorized to draw.

Dated: September 25, 2006

Respectfully submitted,

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